Study on the Use of Free Cash: Past, Present and Recommendations for the Future

Jonathan Chinitz Acton Finance Committee November 26, 2002

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Introduction

It is no secret that municipal budgeting has become somewhat more constrained since the passage of Proposition 2-1/2. Communities are scrambling to balance their budgets with any means affordable. This situation is exacerbated during times of economic uncertainty. Every year the topic of "how much free cash should be used for the operating budget" seems to surface anew. The debates are fast and furious at times.

The purpose of this report is to supplement the research that the Acton Finance Committee started last year, augmenting it with a series of comparative and historical data from other cities and towns in the commonwealth. The primary motivation is to form an educated opinion on the use of Free Cash as part of the town's operating budget and to offer some recommendations of usage based on the data collected. This report is not going to attempt to arrive at a precise formula to forecast the balance of Free Cash in a given year.

For the purposes of simplifying the report there is no attempt to differentiate between the municipal and school budgets, but rather to treat the town's operating budget as one number. After all, as citizens this budget separation is transparent to us. We get one tax bill with one number on it.

What is Free Cash?

In some sense, Free Cash is a result of an imperfect budget process. For any given year the town's revenues are forecast. Based on these revenues town staff and the elected officials put together a budget of how these revenues will be spent. By statute, the forecasted revenues must match the forecasted expenses, i.e. the budget must be balanced. This is what is voted on at Town Meeting. The forecast of major budget items (tax collections, new growth, salaries, utilities, and the like), at least in Acton, is pretty accurate. However, since it is a forecast, there will always be discrepancies in certain line items. These discrepancies create Free Cash.

The other area where Free Cash comes into play is when the Board of Selectmen has to set the tax rate. This is done through the Recapitulation Sheet, or Recap Sheet for short. In this case the budget that was approved by town meeting has to match the actual revenues. In some cases, when the revenue is not known, the DOR will set limits on certain revenue items to make sure that it is not underestimated. These will likely cause positive flow into free cash when the actual revenues come in higher than what was set on the recap sheet.

The Association of Finance Committees defines Free Cash as follows: "Funds remaining from the operations of the previous fiscal year which are certified by

DOR's director of accounts as available for appropriation. Remaining funds include unexpended free cash from the pervious year, receipts in excess of estimates shown on the tax recapitulation sheet and unspent amounts in budget line-items."

Free Cash results from the following:

- 1) Excess earnings (revenues) above forecast;
- 2) Budget turn-backs (reductions in expenses);
- 3) Unexpected changes in the town's balance sheet.

Examples of changes in free cash:

- 1) Payment of any past due taxes will result in an increase in free cash. Consequently, unpaid taxes are a negative offset to free cash. Unpaid taxes are those taxes that were forecast to be collected minus the total taxes that were collected plus any abatements and write-offs.
- 2) Rollback taxes for properties in Chapter Lands (chapter 61, 61A and 61B) that are collected flow into free cash. Chapter Lands are those properties that are classified as agricultural, forestry or recreation, and as a result receive lower tax assessments. Once the use of the land changes (also known as "coming out of chapter"), the back taxes are due.
- 3) One-time, unplanned events such as receipt of monies from an insurance claim that was settled, or the sale of a home that triggers the payment of all tax and betterment delinquencies.
- 4) Unexpended funds in the snow removal budget due to a "warm winter" will cause an increase in free cash.
- 5) Higher than budgeted excise tax collections will flow into free cash.

Research Data

The state's Department of Revenue (DOR) has a division whose primary focus is to gather relevant financial and socio-economic data from all 351 cities and towns in the state and present this data in a variety of formats. This name of this division is the Division of Local Services (DLS) and the web address where most of this data was obtained from is http://www.dls.state.ma.us/allfiles.htm. Unless otherwise noted, all data in this report was obtained from DLS reports.

The research conducted in this report was developed by posing a series of questions and attempting to answer them. These questions were as follows:

- 1) Is Free Cash a predictable source of revenue?
- 2) What is the Certified Balance of Free Cash going to be?
- 3) How does the Growth in Free Cash relate to the Growth in the Operating Budget?
- 4) How much Free Cash, if any, should be used for the operating budget?

- 5) Does the amount of Free Cash have an affect on the town's Bond Rating?
- 6) What is a Stabilization Fund and where does it come into play?
- 7) What should the policy be for the use and maintenance of Free Cash?

When attempting to answer these questions, the report took two approaches. The first approach was to look at the historic data for Acton itself, to see how the growth in free cash over the years affected, if at all, the uses of free cash in the operating budget. The second approach was to compare Acton's uses and balances against a select group of communities. Choosing this group was somewhat arbitrary. There were many criteria that could have been used to determine the comparison group, for example: population size and density, area of the town, degree of reliance on residential taxes to fund operating budgets, overall budget size, school spending and school enrollment. Since Acton spends approximately 70% of its operating budget on education, it is this group of cities and towns that the majority of the comparisons are made against.

In addition, a key metric in performing the analysis was obtaining actual numbers for use of free cash in the operating budgets of these communities, which are NOT available from the DLS site. The towns contacted were Carlisle, Concord, Lexington, Newton, Sudbury and Winchester. These towns also provided some insight into any policies that they use to determine use of free cash. There was not enough historical data from Carlisle to be meaningful, so they are not included in the detail analysis later on. In addition, where available, comparisons were made with Town of Lincoln data as well.

Q1: Is Free Cash a predictable source of revenue?

In the simplest form the answer is yes, in the sense that there is always some amount of free cash left in the budget when the town's balance sheet is certified by the state. The data shows that for the comparison group, as well as for Acton itself (see Figure 1: Acton History of Certified Free Cash), there was always a positive amount of certified free cash in every year dating back to 1982, the year DLS started keeping these statistics. The reasons are obvious: the budgets for a given year are forecast anywhere from 15-18 months ahead of time. Many changes in revenues and expenses can occur between the forecast period and the actual enactment of the budget itself. Bottom line: there will always be some amount of free cash; the question really is how much?

Q2: What is the Certified Balance of Free Cash going to be?

Answering this question attempts to forecast the balance of free cash. As stated earlier, the report is not going to put forth a precise formula for forecasting this balance. Rather it is going to present historical data that can be used, in part, to choose one or more metrics with which an estimate of the balance can be projected.

It should go without saying that the actual balance of free cash as a standalone number is not that relevant. Case in point: as you will read later on, Lexington's average free cash balance is about equal to that of Concord's. However, Lexington operating budget is more than double that of Concord. What is relevant to budget forecasting is what is the anticipated certified balance as a percentage of the overall budget.

The report first looks at a historical average of free cash balances for Acton, dating back to the early 1980s. Acton's average free cash balance for the last five years has been greater than the average for the last 10 years, which has been even greater than the average for the last 15 years. If you add to the mix the anticipated free cash balance that would be available for FY04 (\$3.1M), the average balance for the last five years is up almost 25% (see Figure 2: Average Certified Free Cash – Acton).

Was this phenomenon unique to Acton? The report examined the average free cash balance for the comparison group and found that, with the exception of Lincoln, The 5-year average free cash balance was greater than the 10-year average free cash balance (see Figure 3: Comparison of Average Certified Free Cash Balance FY92-FY02). It is interesting to look at both Lincoln and Lexington average free cash balances. Lincoln's 5-year average declined 6.45% from its 10year average. It is interesting to note that during the period of FY92-FY02 Lincoln had five failed operating overrides, which could mean that they have been using more free cash to offset the affects of the failed overrides, hence the declining balance over time (actual usage of free cash was not available at the time of this report). The inverse is true of Lexington. Note the significant rise in the average free cash balance for Lexington (36.43%). During the same period Lexington passed seven successful operating overrides, representing a total of \$8.75M or 8% of the town's FY02 budget. This influx of revenue into the budget could easily have accounted for the growth in free cash balance. More cash flowing through the system will eventually mean more incidents that will affect free cash balance.

The report examined another interesting statistic. How is the growth in the free cash balance affected by what was spent from the fund in the previous year? Figure 4 illustrates this trend. Note this data was plotted just for Acton. Intuitively, the more you spend in year N should result in a smaller percentage increase in the certified balance for year N+1. In Acton's case, this is true of FY03 for example. However, FY99-FY01 shows opposite trends. From FY99 to FY00 we spent less free cash as a percentage of the certified balance, yet the growth in the balance decreased, when it should have theoretically increased. The same is true between FY00 and FY01. We spent more free cash as a percentage of the certified balance, yet the new balance in FY01 saw a higher

percentage being replenished. During these years the budget growth remained between 8 and 10 percent per year.

It is interesting to note that, based on Figure 4; one could assume that on average the remaining balance of free cash grows by 65% and becomes the certified free cash balance in the following year. We will use this metric at the end of the report as one of the forecasters for free cash.

Q3: How does the growth in free cash balance relate to the growth in the operating budget?

Another way to ask this question is "what should the certified free cash balance be as a percentage of the operating budget?" The Finance Committee Handbook says that "Typically, a community will attempt to maintain a free cash balance of between three and five percent of its total budget as a hedge against unforeseen expenditures, to ensure there will be an adequate reserve to prevent sharp fluctuations in the tax rate, and to prevent expensive short-term borrowing."

The historical data for the comparison group shows a wide range of free cash balances as a percentage of the operating budget. Figure 5 shows the numbers for a 10-year average and Figure 6 for a five-year average. With the exception of Lincoln, the changes in the certified balance as a percentage of the budget were within 0.5%. For both the 10-year average and the five-year average, Newton and Winchester kept their free cash balance below the recommended low of 3%. It is interesting to note that for the same period of time, both Newton and Winchester's bond rating from Moody's was AAA, the highest there is.

Despite the guidelines from the Association of Finance Committees, Figures 5 and 6 seem to indicate that the average certified free cash balance is more dependent on town budget policy and financial circumstances than adherence to a strict percentage range.

Q4: How much Free Cash, if any, should be used for the operating budget?

To answer this question, the report looked at three different metrics:

- a. History of the percentage of the certified free cash balance that was used for the budget (irrespective of the size of the budget);
- b. History of the percentage of the budget that was made up from free cash;
- c. History of the remaining free cash balance as a percentage of the budget.

The first one is more of a traditional approach to the use of free cash, but one that ignores the relationship between it and the size of the budget. The other two metrics do relate use of free cash to the size of the budget, but take different approaches. The first tries to look at free cash as a source of revenue, in other words how much of a town's budget should be made up of free cash.

The second tries to look at free cash more as a stabilization fund, by asking how much should be left in the fund balance as a percentage of the budget.

Following is a summary of the three metrics for each of the towns in the comparison group. At the end, the report summarizes these numbers in tables 2 and 3, in an effort to draw some conclusions.

Acton

[FY03 Budget: \$61M]

Looking at the charts for Acton, Figure 7a tracks the percentage of free cash used from the total fund balance. Note that during years where there were successful overrides (1990-1992), the use of free cash was zero, while during years that coincided with, or immediately after, failed overrides the use was high (1994-1995). Figure 7b indicates that there were years when over 3.0% of the operating budget was made up from free cash (1996, 1997 and 2003), while the average fluctuated between 1.5% and 2.0%. Figure 7c shows that on average the town kept free cash balance between 2.5% and 3.0% after appropriation.

Concord

[FY03 Budget: \$53M]

Concord has shown to be pretty consistent with its use of free cash (it should be noted that only the last five years of data were available). On average, Concord uses one third of its free cash balance for operating expenses (Figure 8a). 2.77% of Concord's operating budget is made up of free cash (Figure 8b). As a policy, Concord tries to maintain a fund balance of at least 5% of the operating budget after appropriation (Figure 8c). This was confirmed in a discussion with the town's budget analyst.

Lexington

[FY03 Budget: \$116M]

Lexington, like Concord, has been pretty consistent with its use of free cash. On average it uses 60-65% of its certified balance for the operating budget (Figure 9a), but since their budget is twice the size of Acton and Concord that number only represents 1.78-2.11% of the operating budget (Figure 9b). A more aggressive use of free cash also means less of a balance, on average, after appropriation (Figure 9c).

Newton

[FY03 Budget: \$258M]

An analysis of the data for Newton shows that there is a shift in free cash behavior around the 1997-1998 timeframe. This shift in policy was confirmed during discussions with the town's finance director. During those same discussions it was learned that Newton has no stabilization fund. Instead it uses monies that are declared as overlay surplus to offset any large, one-time

expenditures (in much the same way that both free cash and normal stabilization funds can be used). The budget is constructed with this in mind: the assessors expect to receive an appropriation of 1.4% of the town's levy as overlay, and in return the town expects approximately half of that money to be declared as surplus, which will then flow into free cash.

Figure 10a clearly shows the policy shift, where in 1998 they allocated 87% of the balance to the budget, while in 2003 that number is down to 21%. In a similar fashion, Figure 10b shows the policy of reducing the amount of free cash as a percentage of the budget. In 1997 it was as high as 1.86% while in 2003 it was as low as 0.47%. Conversely, figure 10c shows the depletion of free cash during the 90s and the buildup of free cash in the latter part of the 90s into 2000 and beyond.

Sudbury

[FY03 Budget: \$70M]

Sudbury treats free cash as if it didn't exist. Meaning that any amount of free cash that is certified in a given year is used as a source of revenue for the following year's budget. It seems, from examining the data, that this policy was enacted circa 1995, where figure 11a shows a clear spike in the use of free cash. Interestingly, figure 11b shows a wide spread of numbers with respect to the percentage of free cash in the budget. One explanation might be that between 1993 and 1999 Sudbury had no operating overrides, hence the steady increase in free cash as a percentage of the budget. The reliance decreases during 2000-2002 with overrides in 1999 and 2001. Figure 11c matches the behavior depicted in figure 11a.

Winchester

[FY03 Budget: \$61M]

The data for Winchester seems to indicate a shift to a more conservative approach in the use of free cash in the last 3-4 years. Figures 12a and 12c bear this out. Figure 12a shows a marked drop in the use of free cash, while figure 12c shows a marked increase in the remaining balance after appropriation as a percentage of the budget. It is also important to note that Winchester passed a significant operating override for FY03 (\$4.5M) representing 7.5% of the budget, which could explain the continued drop in free cash usage.

Summary Usage Statistics

ACTON Average 5 Years 10 Years 15 Years % Spent from Total Certified 35.81% 47.82% 32.64% % Spent from Budget 1.68% 2.00% 1.49% % Left from Budget 2.83% 2.55% 3.03%

Table 1: Acton Usage Statistics

GROUP	5 Y	EAR AVERAG	E	10 YEAR AVERAGE			
				•		% Left from Budget	
ACTON	35.81%	1.68%	2.83%	47.82%	2.00%	2.55%	
CONCORD 2	33.15%	2.77%	5.65%				
LEXINGTON	59.17%	2.11%	1.33%	64.06%	1.78%	0.97%	
NEWTON	40.86%	0.96%	1.40%	45.33%	1.04%	1.36%	
SUDBURY	96.97%	2.74%	0.11%	86.64%	2.14%	0.32%	
WINCHESTER 1	57.08%	1.70%	1.55%	70.08%	1.64%	1.28%	

Table 2: Comparison Group Usage Statistics

Note 1: Second set of numbers is 7-year averages Note 2: No 10-year data available for Concord.

Q5: Does the amount of Free Cash have an affect on the town's Bond Rating?

In general, a town's bond rating is determined by the wealth of the community (personal income, value of homes) and by the management of the community's finances (past performance, future planning). The first parameter has nothing to do with free cash. The second parameter, in particular the planning aspect, most likely incorporates past and future usage of free cash, amongst a whole host of variables that make up the town's fiscal performance.

Historical data indicates, however, that for the above set of communities, which as the report indicates, have a variety of free cash policies; the bond rating remained consistent over the years.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ACTON	AA	Aa	Aa	AA	AA	Aa	Aa2	Aa2	Aa2	Aa2	Aa2
CARLISLE	A1	A1	AA	Aa2	Aa2						
CONCORD	AAA										
LEXINGTON	AAA										
LINCOLN	AA	AA	AA1								
NEWTON								AAA	AAA	Aaa	Aaa
SUDBURY	Α	Α	AA	Aa2	Aa2						
WINCHESTER	AAA										

Source: DOR

Table 3: Moody's Bond Rating FY92-FY02

Q6: Where does a Stabilization Fund come into play?

The Association of Finance Committees defines a stabilization fund as "an account from which amounts may be appropriated for any lawful purpose... Towns may appropriate into this fund in any year an amount not to exceed 10 percent of the prior year's tax levy...The aggregate of the stabilization fund shall not exceed ten percent of the town's equalized value...A two-thirds vote of town meeting or city council is required to appropriate money from the stabilization fund."

The primary differences between a stabilization fund and free cash are that the former is predictable while the latter is less so; and a 2/3 vote is required to appropriate funds from stabilization, whereas free cash requires a majority vote only. However, in the context that this report looks at these two funds, they can be treated in the aggregate as a form of "reserve fund" or "rainy day fund". By combining the balance of the stabilization fund with free cash we can lessen the burden on maintaining a preset level of free cash. However, in tight budgetary times it is likely to be difficult to build up a reserve fund balance.

Figure 13 shows the free cash and stabilization fund balances for the comparison group as a percentage of FY02 budgets. Figure 14 expands that view to 22 neighboring communities (Bedford, Belmont, Bolton, Boxborough, Carlisle, Chelmsford, Concord, Dover, Framingham, Groton, Harvard, Lexington, Lincoln, Littleton, Maynard, Newton, Stow, Sudbury, Wayland, Westford, Weston, Wellesley). Again, there does not seem to be a strict policy in terms of balance maintained. Approximately 1/3 of the towns show a combined balance under 5% of budget, 1/3 show a balance between 5% and 10% of budget, and the rest are above 10%. There are extreme cases, for example Littleton has a very large stabilization fund (26.6%) with very little free cash balance. Littleton uses their stabilization fund to fund projects from their capital plan (such as their new high school, which was funded without a debt exclusion override). Bolton, on the

other hand, has a free cash balance of 21% with no stabilization fund balance at all.

Q7: What should the policy be for the use and maintenance of Free Cash?

As the report indicates, the answer to this question is a combination of policy issues, the financial situation of the town and the state of the economy. Some towns treat free cash as a non-recurring source of revenue – and spend it all, others are wary to do so. In tough times many towns have resorted to using more free cash in lieu of increasing the tax levy through operating overrides. A strong economy drives new growth, which in turn drives the acquisition of land, which in turn can accelerate back tax collections. The combinations and permutations are endless.

Using some of the metrics developed above, here are some possible scenarios for the use of free cash in the FY04 budget. The assumptions are that current free cash balance will be certified at \$3.1M and that the estimated budget for FY04 will be \$67M (this is higher than the ALG number since DOR includes some amount of receipts and other funds in the total budget number).

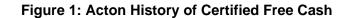
Metric FY02 Certified Balance (est.) FY04 Budget (est.)	Desired Value \$3,100,000 \$67,000,000	Free Cash Usage
% Spent from Total (Acton High % Spent from Total (Acton Low % Spent from Budget (Acton Low % Spent from Budget (Acton Low % Spent from Budget (Newton I % Spent from Total (Sudbury 5- % Spent from Budget (Sudbury % Left from Budget (Acton 5-Ye % Left from Budget (Concord)) gh) w) Low) -Year) 5-Year)	\$1,482,360.58 \$1,011,914.18 \$1,341,012.84 \$995,606.91 \$644,288.57 \$3,005,999.03 \$1,832,701.41 \$1,204,565.49 (\$685,563.72)
Anticipated FY03 Balance (Acton 5-Year average)	\$3,309,800.00	
If we want the: FY03 Certified Balance FY03 Certified Balance FY03 Certified Balance	To be: \$3,000,000 \$2,000,000 \$1,000,000	\$1,281,818.18 \$1,887,878.79 \$2,493,939.39

Table 4: Scenarios for Use of Free Cash for FY04 Budget

Acknowledgements

The following individuals contributed to this report:

Steve Barrett, Director of Finance, Town of Acton Chairman, Finance Committee, Town of Carlisle Jonathan Harris, Budget Analyst, Town of Concord Madonna McKenzie, Town Administrator, Town of Carlisle Ian Moncrieff, Member, Acton Finance Committee John Murray, Assistant Town Manager, Town of Acton Sanford Pooler, Chief Budget Officer, City of Newton John Ryan, Director of Finance, Town of Lexington Kerry Speidel, Finance Department, Town of Sudbury



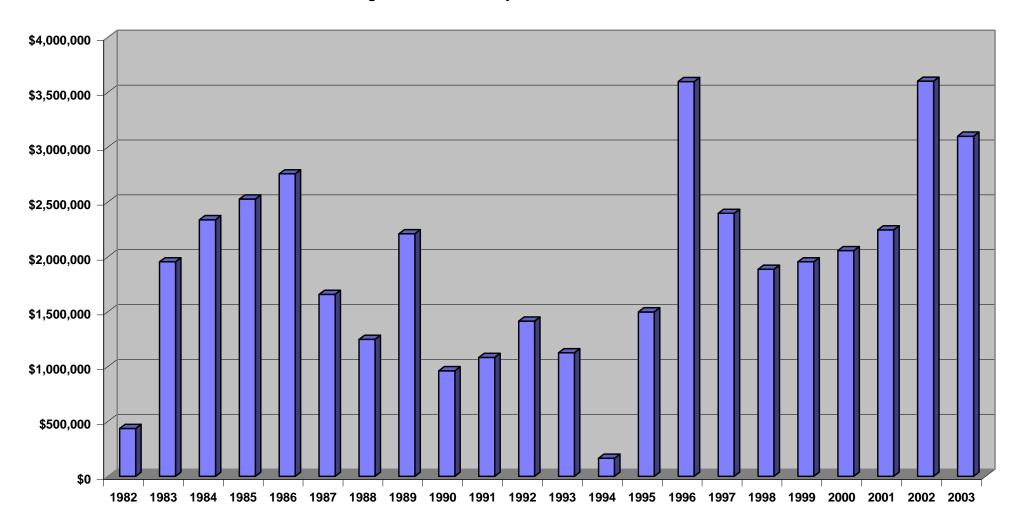


Figure 1: Acton History of Certified Free Cash

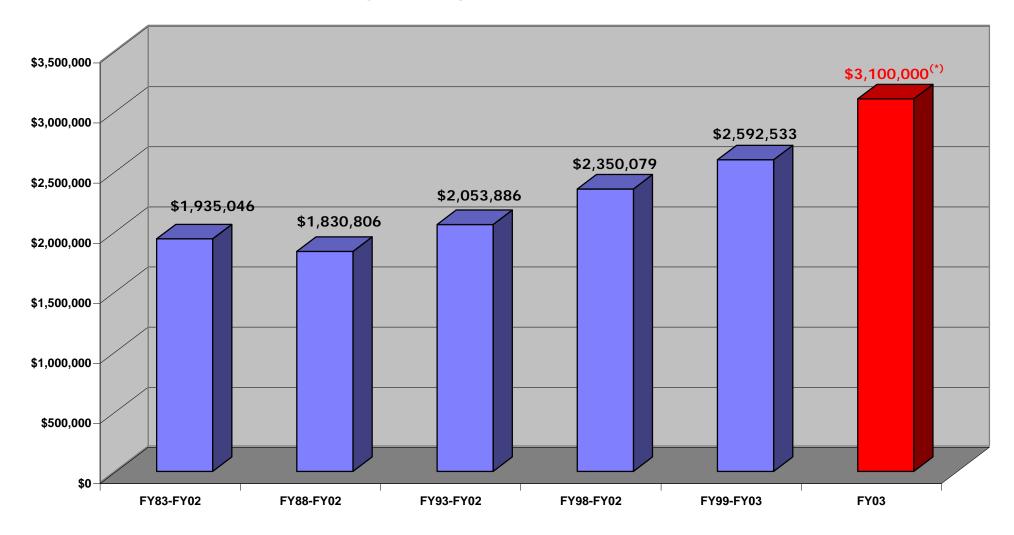
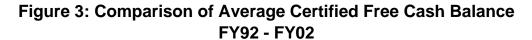


Figure 2: Average Certified Free Cash -- Acton

Figure 2: Average Certified Free Cash Balance



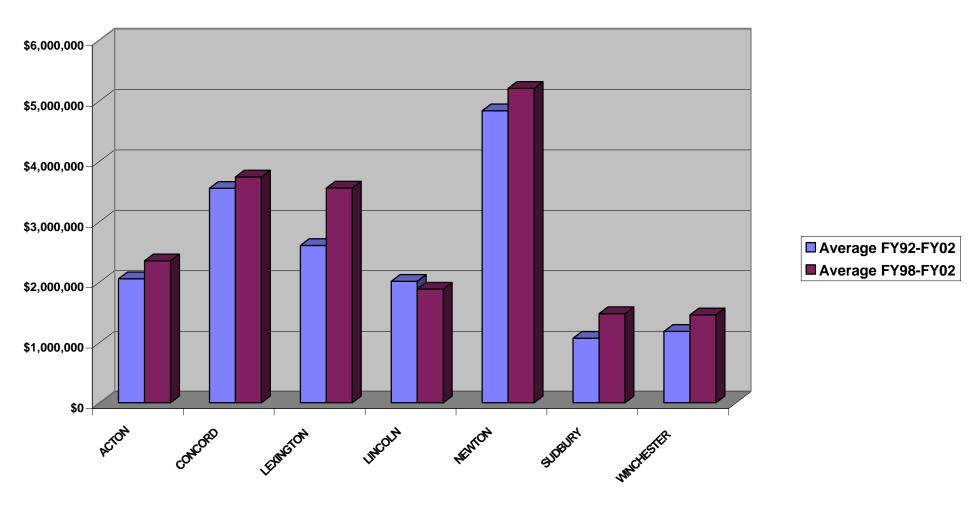


Figure 3: Comparison of Average Certified Free Cash Balance



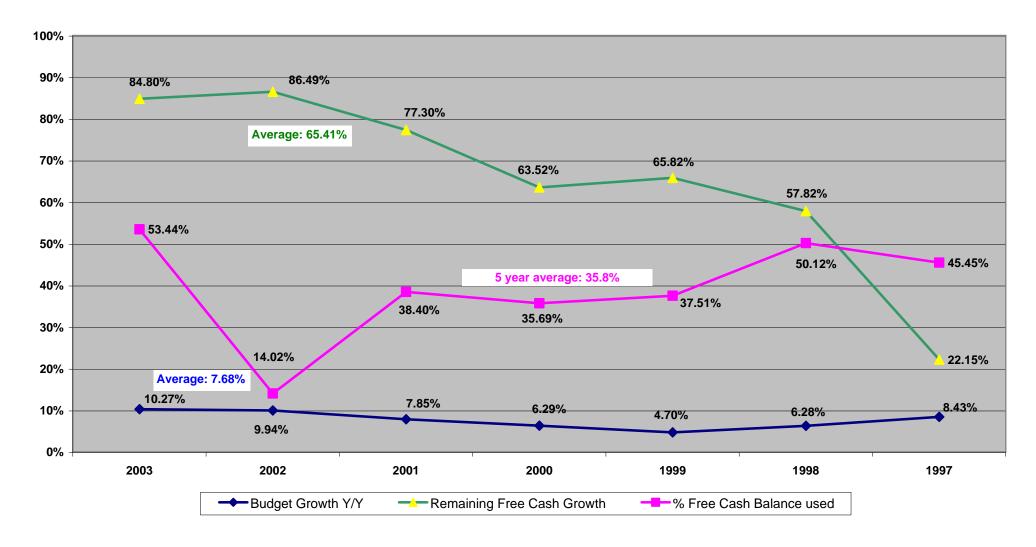


Figure 4: Growth in Free Cash vs. % Spent



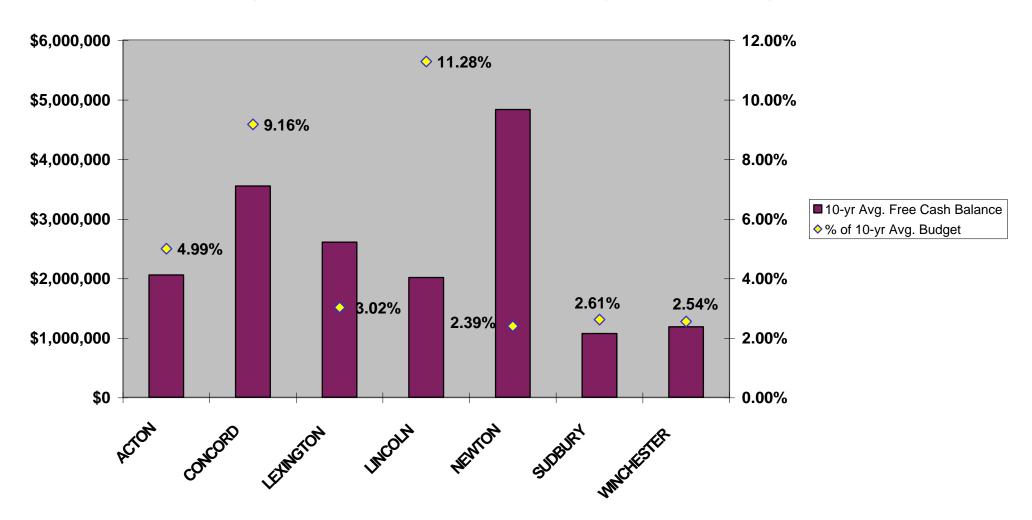


Figure 5: Certified Free Cash as % of Budget -- 10-Year Averages



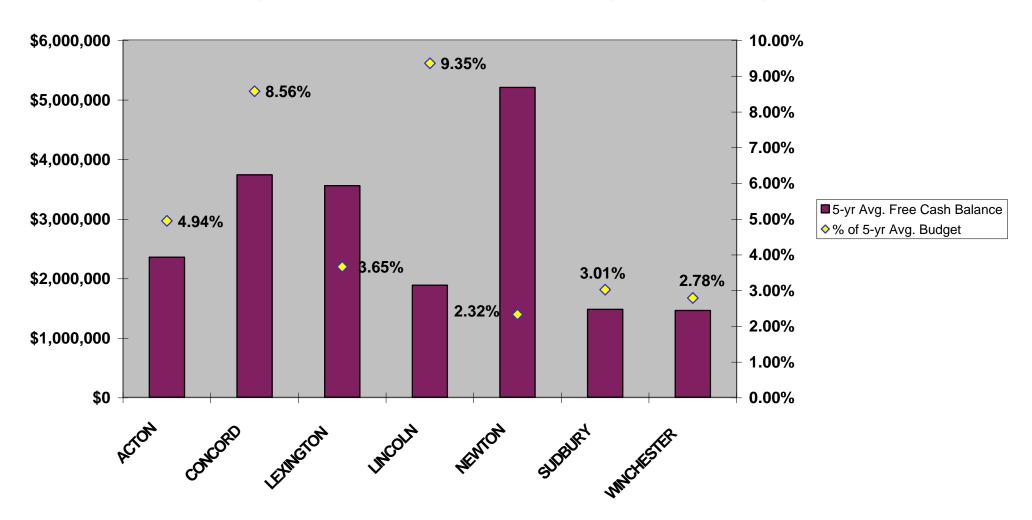


Figure 6: Certified Free Cash as a % of Budget 5-Year



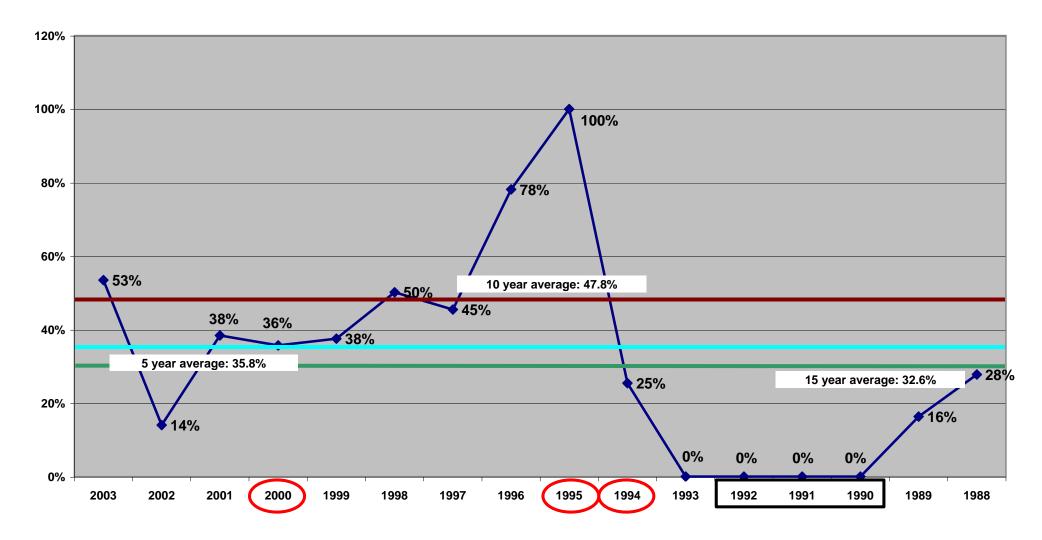


Figure 7: Acton Metrics

Figure 7b: Free Cash used as a % of Budget - Acton

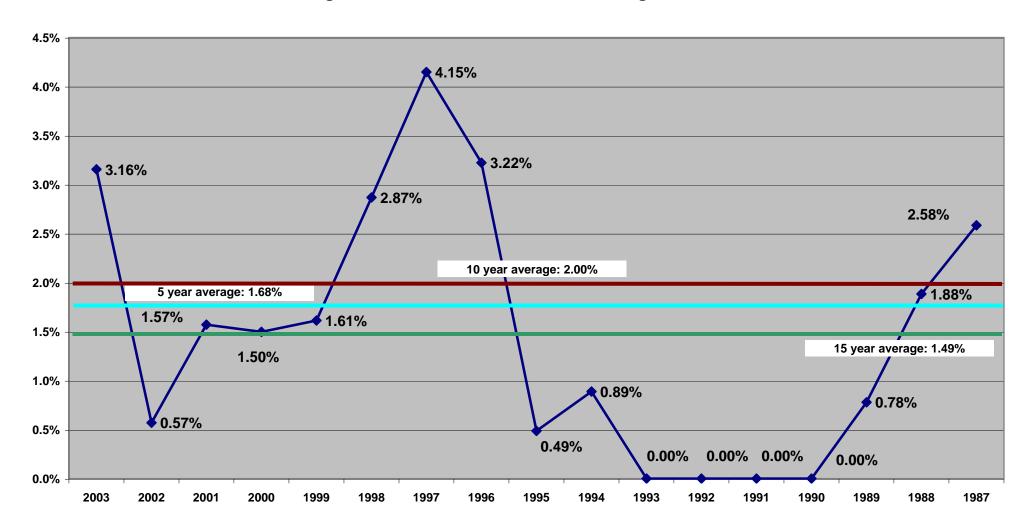
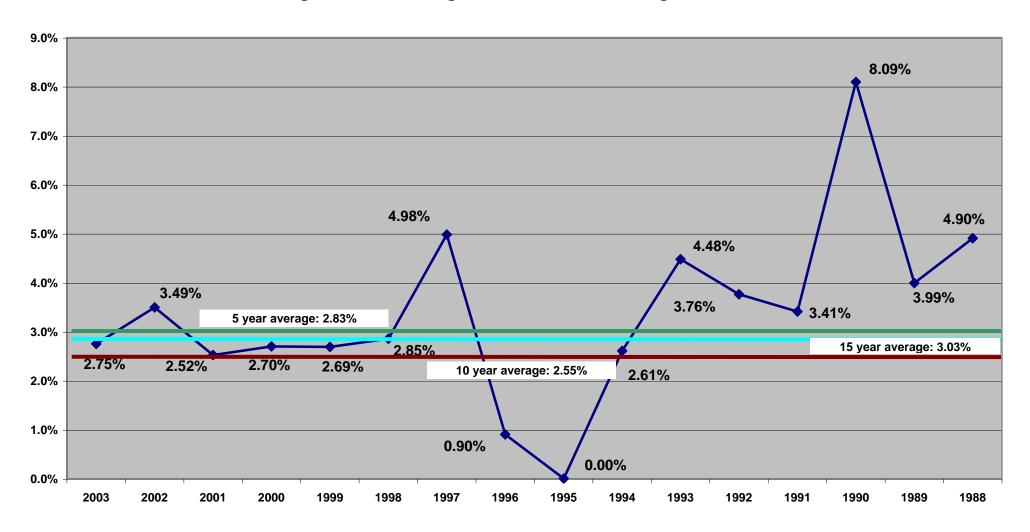


Figure 7c: Remaining Free Cash as a % of Budget - Acton





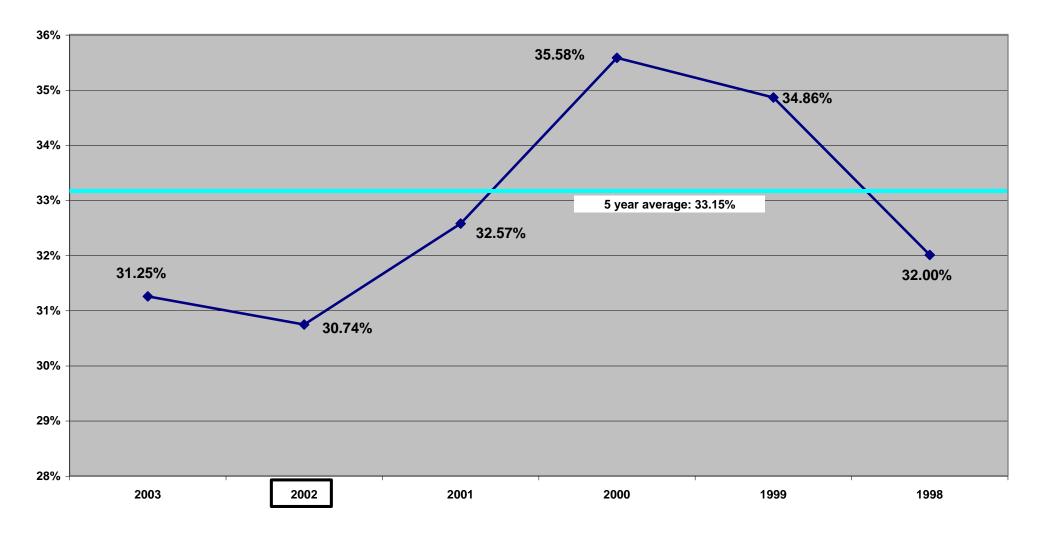
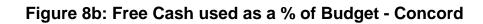
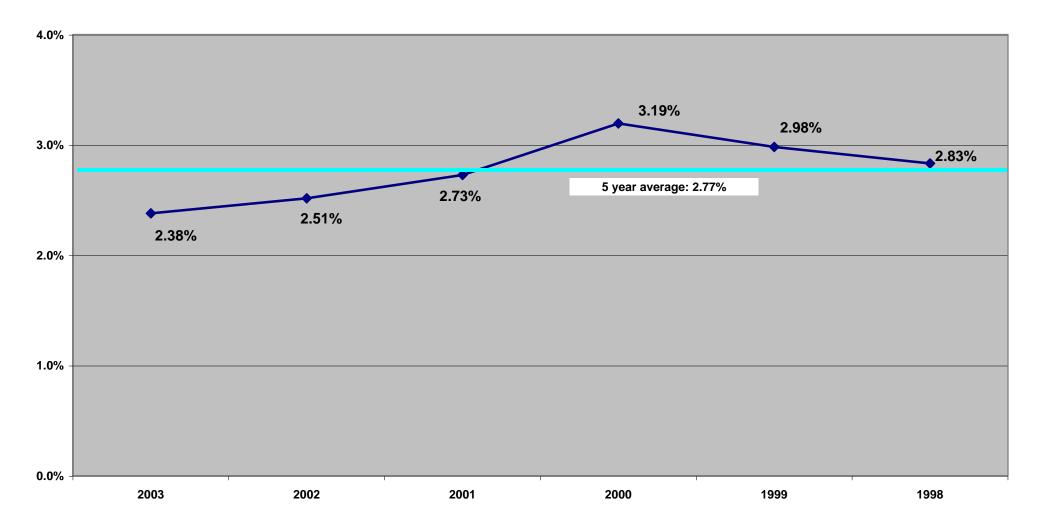
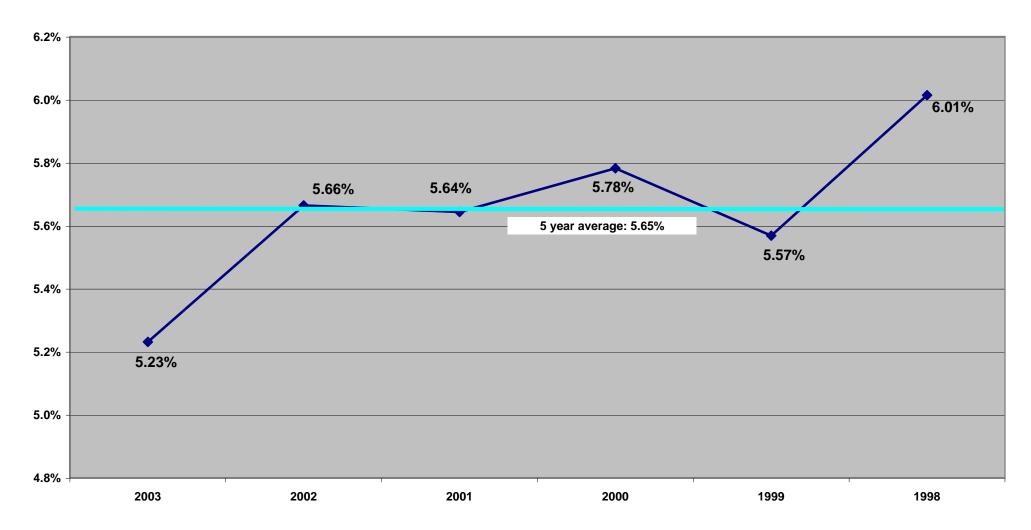


Figure 8: Concord Metrics











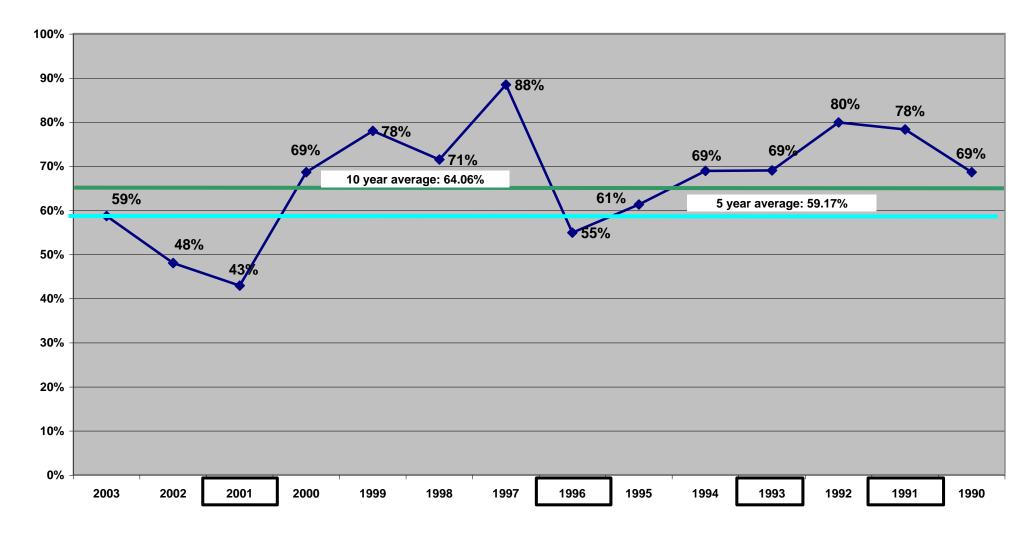


Figure 9: Lexington Metrics

Figure 9b: Free Cash used as a % of Budget - Lexington

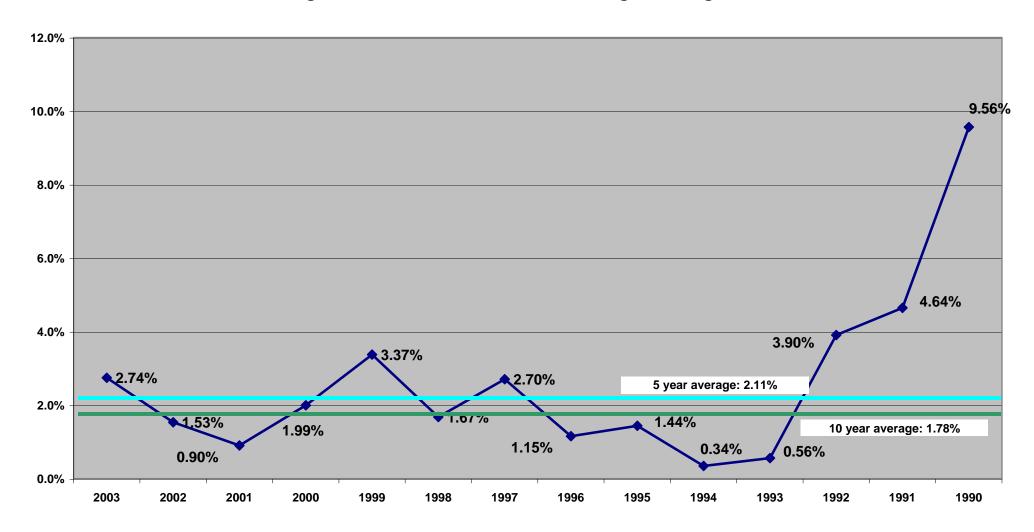
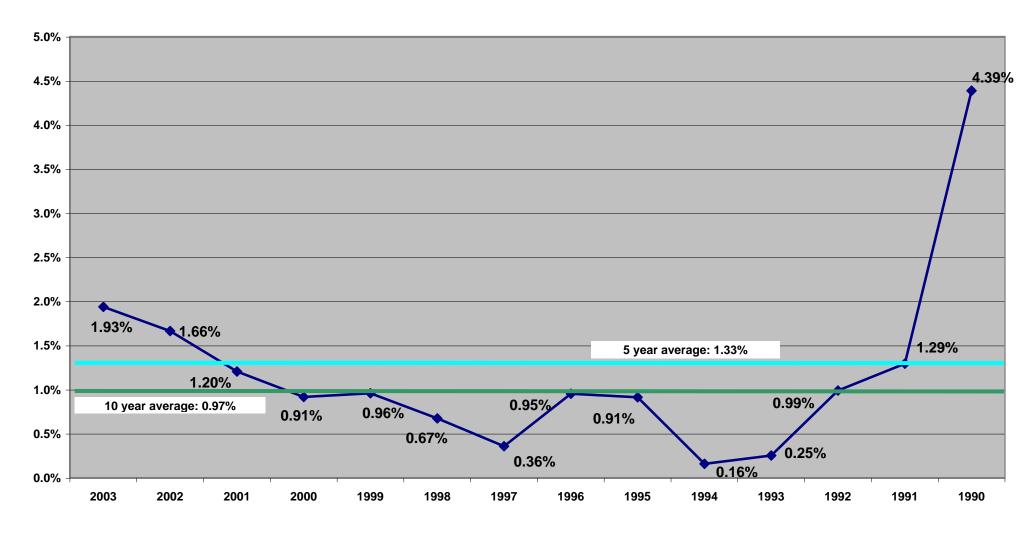


Figure 9c: Remaining Free Cash as a % of Budget - Lexington





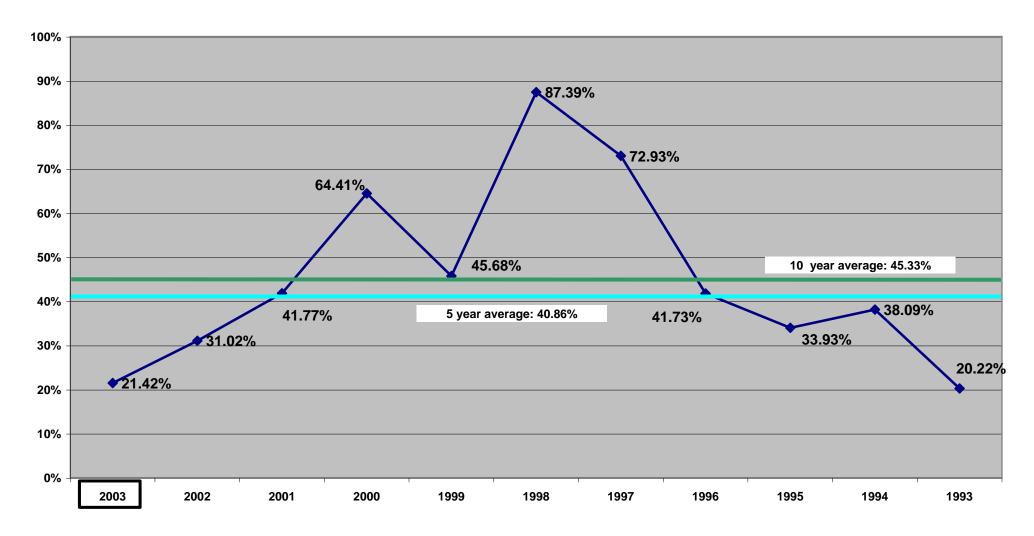


Figure 10: Newton Metrics

Figure 10b: Free Cash used as a % of Budget - Newton

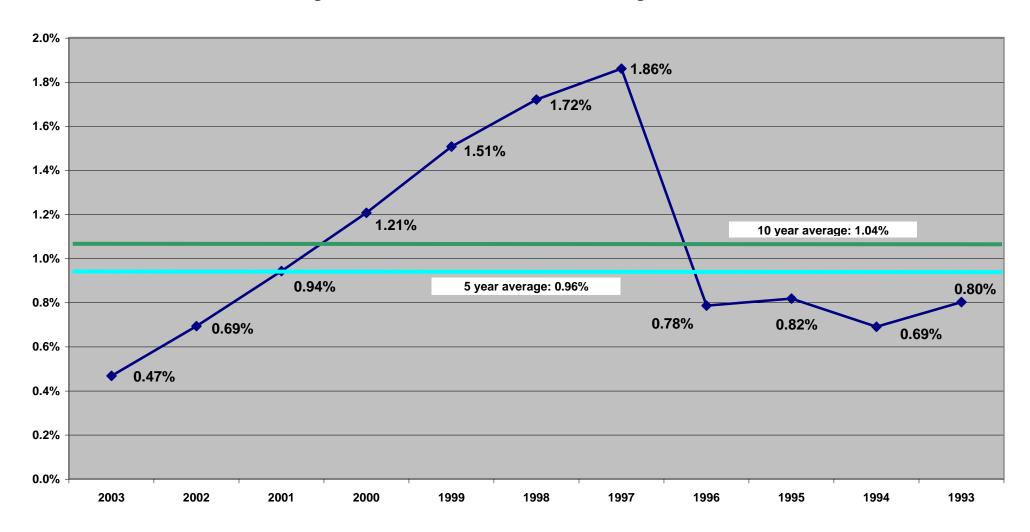
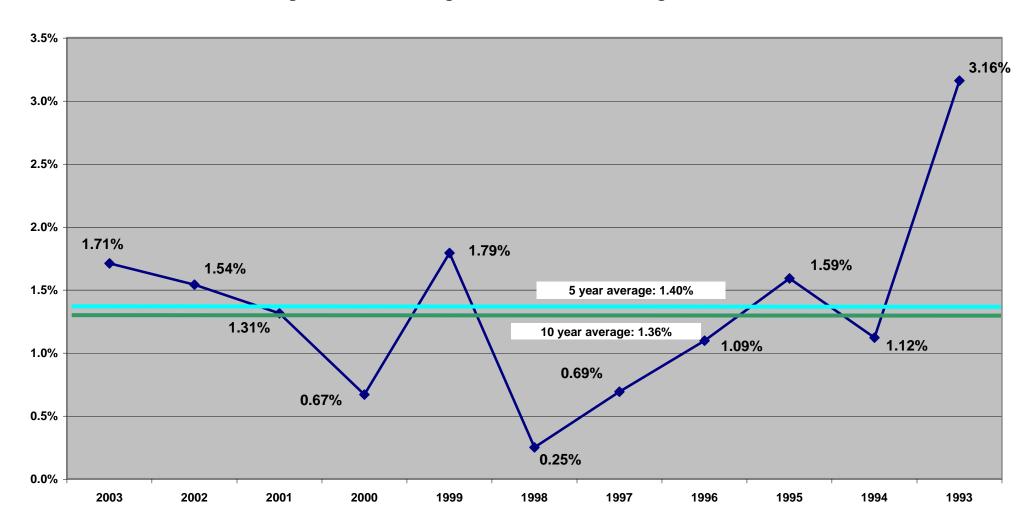


Figure 10c: Remaining Free Cash as a % of Budget - Newton





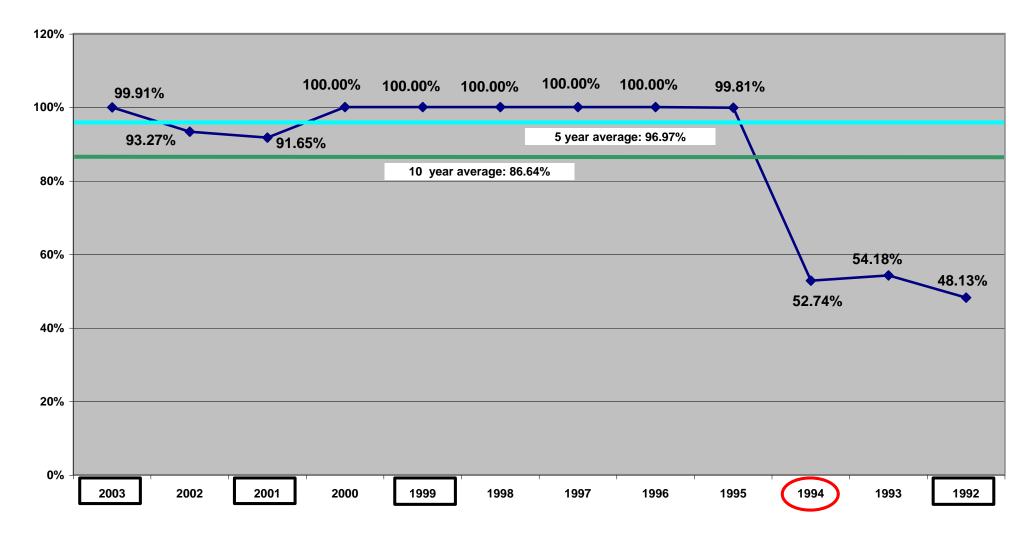


Figure 11: Sudbury Metrics

Figure 11b: Free Cash used as a % of Budget - Sudbury

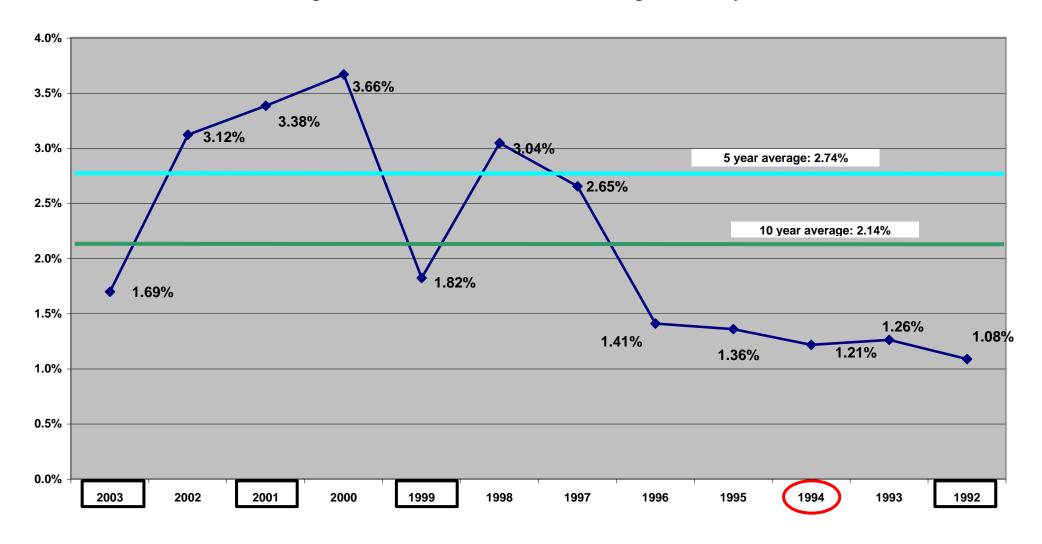
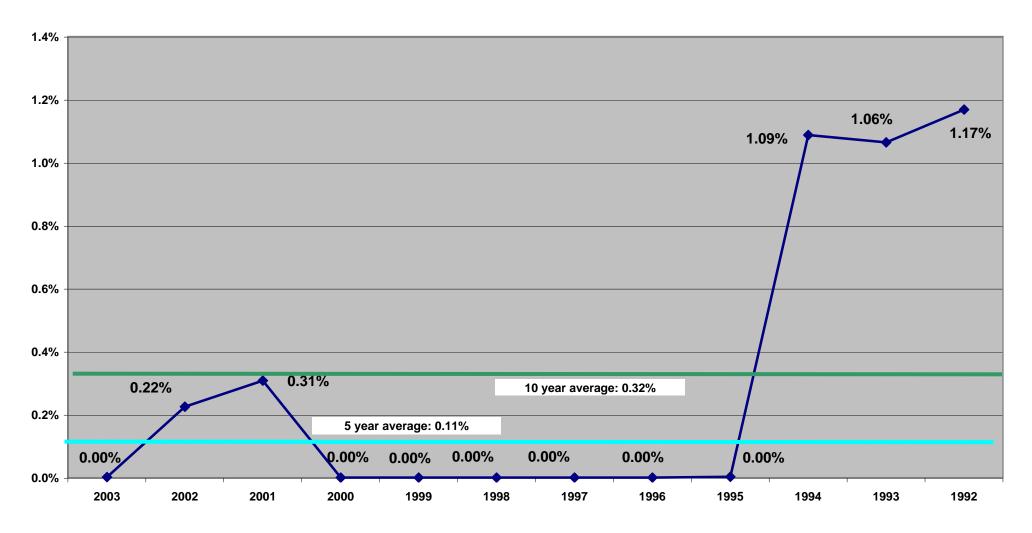


Figure 11c: Remaining Free Cash as a % of Budget - Sudbury





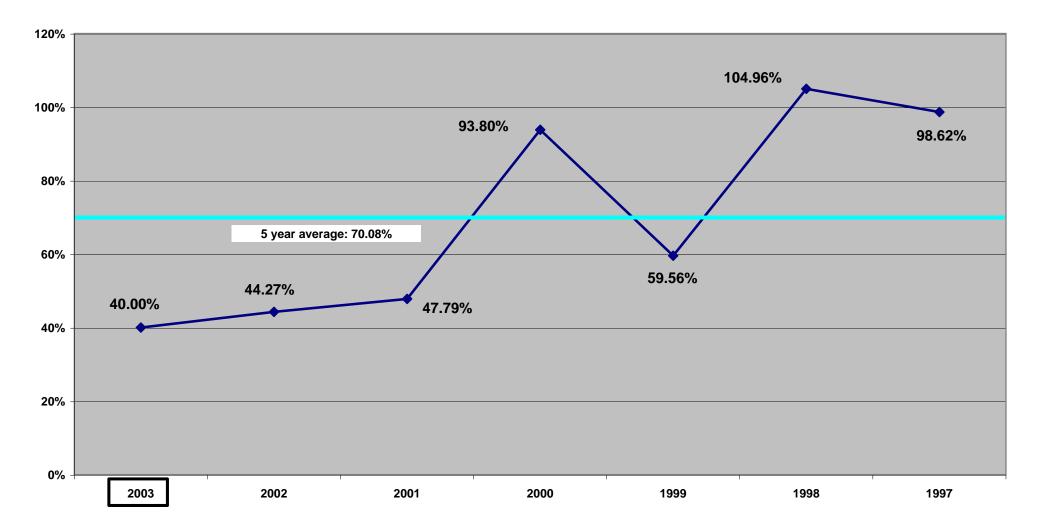
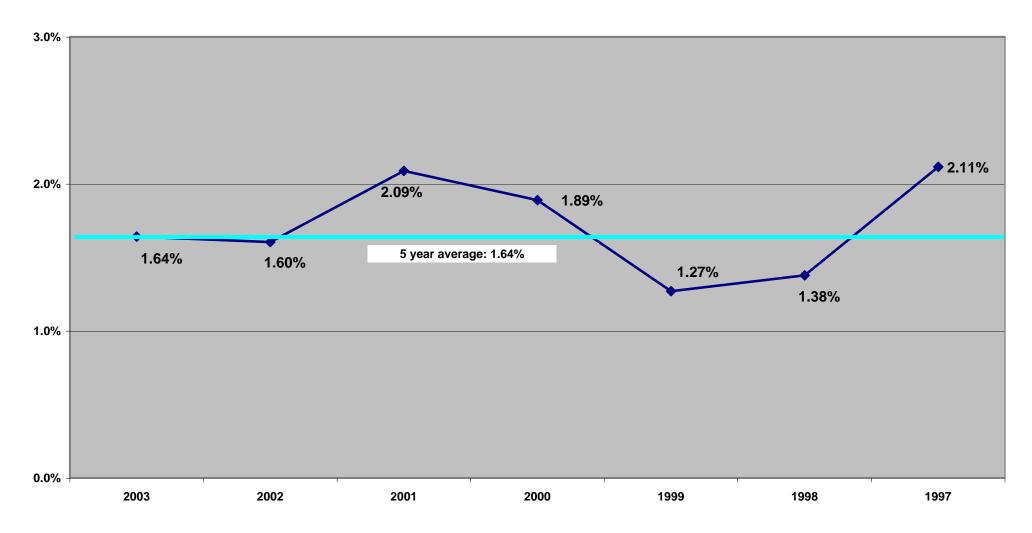
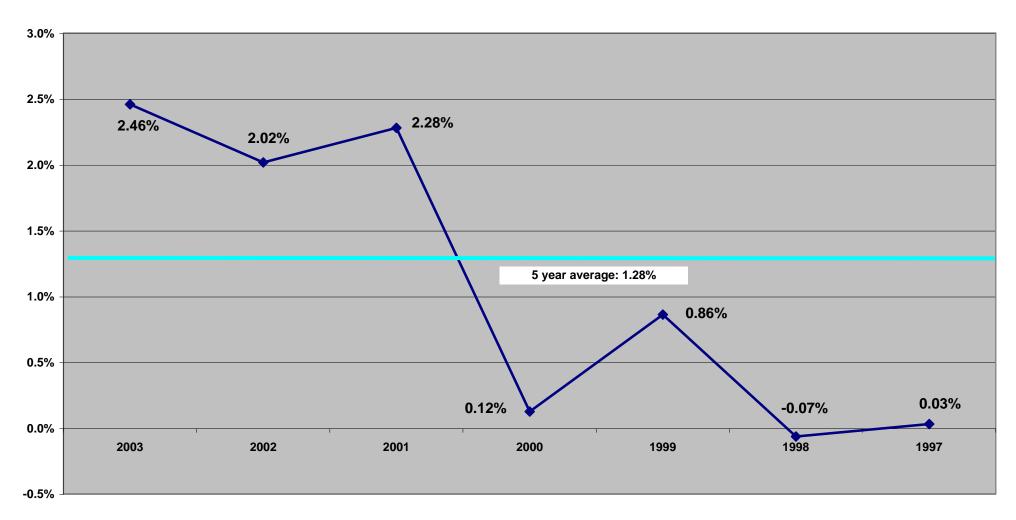


Figure 12: Winchester Metrics

Figure 12b: Free Cash used as a % of Budget - Winchester







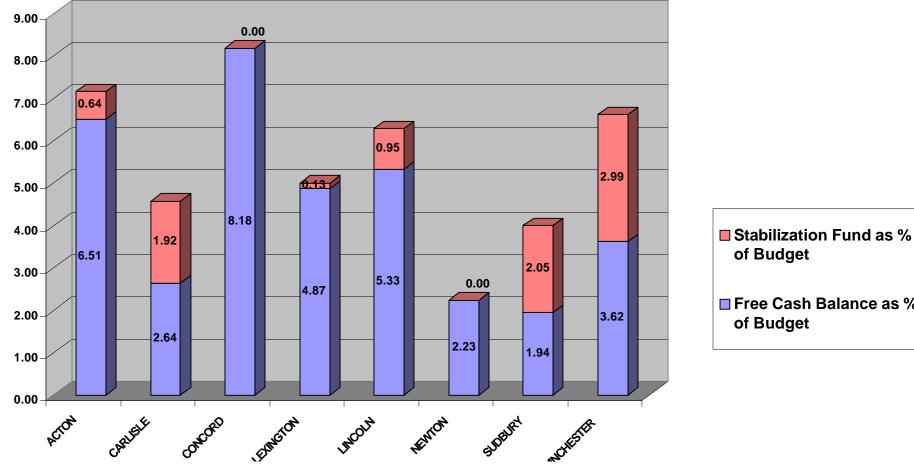
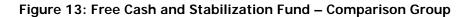


Figure 13: FY02 Free Cash and Stabilization Comparison



- **■** Free Cash Balance as %

Figure 14: Free Cash and Stabilization Fund balances in Acton and 22 adjacent towns as a percent of FY02 budgets (Stab Fund as of 6/30/01, Free cash certified as of 07/01/01)

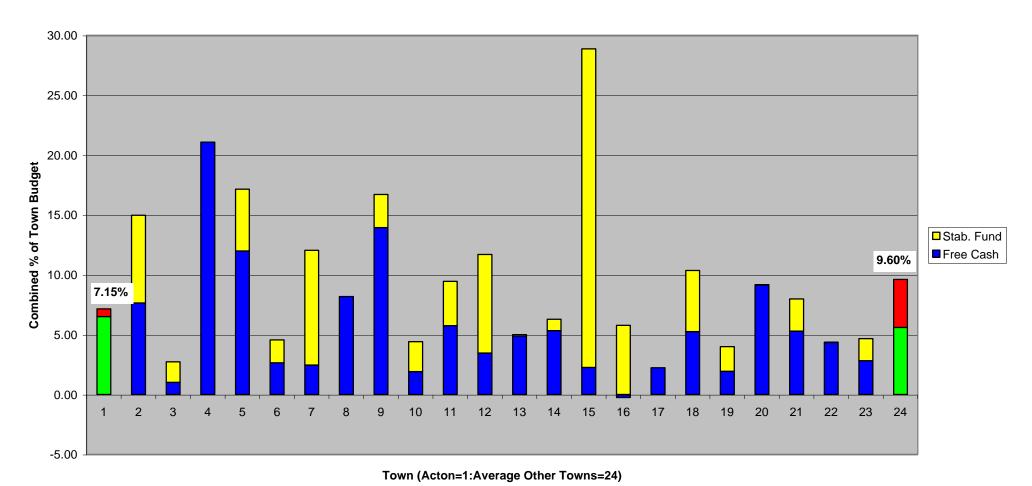


Figure 14: Free Cash and Stabilization -- 22 Towns